

2000-118766/11 A96 D21 E13 (A26) OREA 1998.06.26  
L'OREAL SA \*FR 2780279-A1  
1998.06.26 1998-008162(+1998FR-008162) (1999.12.31) A61K 7/40,  
7/06

Cosmetic sunscreen composition containing benzimidazole derivative

C2000-036624

Addnl. Data: CANDAU D

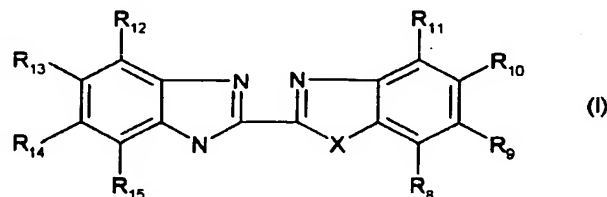
#### NOVELTY

Cosmetic composition contains a benzimidazole derivative (I) and an organomodified silicone (II) that does not absorb ultraviolet radiation.

#### DETAILED DESCRIPTION

The benzimidazole derivative is of formula (I):

A(6-AE4, 12-V4A, 12-V4C) D(8-B9A) E(6-D5, 6-E1, 6-F1)



X = S, NH, NR1 or O; R1 = 1-20C alkyl, 2-20C alkenyl, 3-15C cycloalkyl, 6-12C aryl, (6-12C)aryl(1-6C)alkyl, 2-21C alkoxy, 5-12C heteroaryl, all optionally substituted by 1-6C alkyl, 1-16C alkoxy, 6-12C aryloxy, NH2, OH, CONR2R3, COOR4 or Si(OR7)3 or interrupted by ether bonds;  
R2, R3 = H or 1-6C alkyl;  
R4 = H, 1-16C alkyl, 6-12C aryl or CH(R6)CH2(OCH(R6)CH2)nOR5;  
R5 = 1-4C alkyl;  
R6 = H or Me;  
R7 = 1-4C alkyl;

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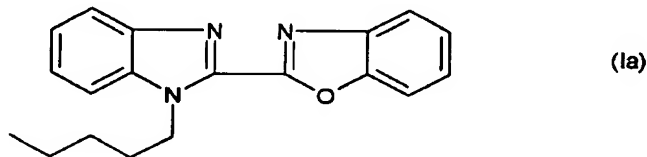
n = 0-4;  
R8-R15 = H, NH2, NO2 or R1.

#### USE

For protecting the skin and/or hair from the effects of ultraviolet radiation, especially solar radiation.

#### SPECIFIC COMPOUNDS

17 Compounds (I) are cited in claims, e.g. 2-(1-n-pentyl-2-benzimidazolyl)-benzoxazole of formula (Ia):

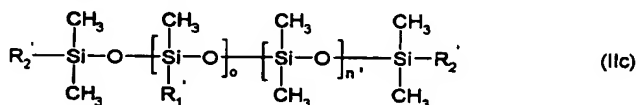
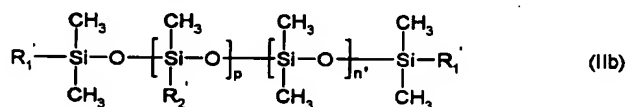
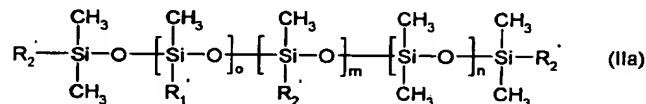


#### TECHNOLOGY FOCUS

Polymers - Preferred Silicone: (II) is preferably selected from the

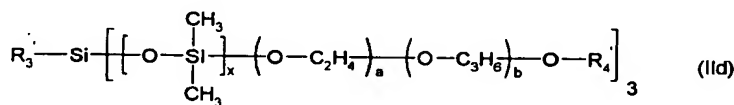
following:

(1) alkoxyated silicones of formula (IIa)-(IId):



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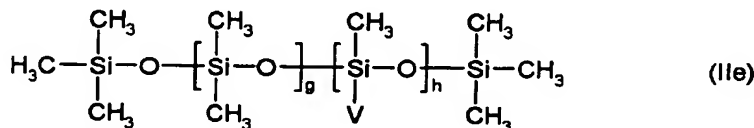


R1' = 1-30C alkyl or phenyl;  
R2' = C6H2cO(C2H4O)a(C3H6O)bR5' or C6H2cO(C4H8O)aR5';  
R3', R4' = 1-12C alkyl, preferably Me;  
R5' = H, 1-12C alkyl, 1-6C alkoxy, 2-12C acyl, OH, SO3M, OCOR6', optionally N-substituted 1-6C aminoalkoxy, optionally N-substituted 2-6C aminoacyl, NHCH2CH2COOM, (CH2CH2COOM)2 (sic), optionally substituted aminoalkyl, 1-30C carboxyacyl, phosphono (optionally substituted by 1-2 substituted aminoalkyl groups), CO(CH2)dCOOM, OCOCHR7'(CH2)dCOOM, NHCO(CH2)dOH or NH3Y;  
M = H, Na, K, Li, NH4 or organic ammonium;  
R6' = 1-30C alkyl;  
R7' = H or SO3M;  
d = 1-10;  
m, o = 0-20;

n' = 0-500;  
p = 1-50;  
a, b = 0-50;  
a+b = 1 or more;  
c = 0-4;

x = 1-100; Y = an anion;

(2) carboxyalkyl silicones of formula (IIe):



V = (R1O)eR2(OR3)cCOOM;  
R1, R3 = 2-20C alkylene;  
R2 = 1-50C alkylene optionally substituted by OH;  
e = 0 or 1;  
f = 0-200; M = H, alkali(ne earth) metal, NH4 or quaternary

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